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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,534	01/10/2002	Junming Le	0975.1005-016	4929
21005	7590	03/22/2006	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			GAMBEL, PHILLIP	
			ART UNIT	PAPER NUMBER
			1644	

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,534

Applicant(s)

LE ET AL.

Examiner

Phillip Gambel

Art Unit

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,7-10,14-16,18,19 and 21-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected. 3, 7-10, 14-16, 18, 19, 21-31
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office Action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 1/3/06 has been entered.

Applicant's amendment, filed 1/3/06, has been entered.

Claims 4-5, 11-13, 17 and 20 have been canceled. Claims 2 and 6 have been canceled previously.

Claims 1, 3, 7 and 8 have been amended

Claims 21-31 have been added.

Claims 1, 3, 7-10, 14-16, 18-19 and 21-31 are pending.

2. The text of those sections of Title 35 USC not included in this Action can be found in a prior Action.

This Action will be in response to applicant's arguments, filed 1/3/06.

3. Applicant's assertions concerning priority of the instant application have been fully considered but are not found convincing.

Applicant's reliance upon various sections of the instant specification as well as the disclosure of the priority applications USSNs 07/670,827 and 07/943,852 to support the recitation "TNF- α -mediated disease which results in joint stiffness" is acknowledged.

However, the recitation of "TNF- α -mediated disease which results in joint stiffness" is not readily apparent either in the pending or priority applications.

It appears that applicant relies upon a generic description of TNF- α -mediated human diseases and the "increase TNF concentrations relative to normal levels can also be localized to specific regions or cells in the body, such as joints ..." (e.g. see page 57, lines 25-28 of the instant specification) and various citations throughout the instant disclosure where "joint stiffness" is evaluated in the clinical monitoring of "rheumatoid arthritis patients" to support the recitation of "TNF- α -mediated disease which results in joint stiffness" as currently claimed.

Therefore, reliance upon the genus of "TNF- α -mediated human diseases" and the disclosure of the expression of TNF in joints and the monitoring of "joint stiffness" in rheumatoid arthritis patients, does not support the recitation of "TNF- α -mediated disease which results in joint stiffness", as currently claimed.

It appears that applicant relies upon the description of "stiffness" in the context of "rheumatoid arthritis" only (e.g. see Treatment of Arthritis, Sepsis, Allograft Rejection and Graft Versus Host Disease on pages 45-47 of priority document USSN 07/943,852) to support the recitation of "TNF- α -mediated disease which results in joint stiffness" as currently claimed.

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Therefore, reliance upon the species of "joint stiffness" in "rheumatoid arthritis patients" does not support the recitation of "TNF- α -mediated disease which results in joint stiffness", as currently claimed.

It is acknowledged that the mechanism of treatment via TNF- α -specific antibodies would be the same regardless of the TNF- α -mediated disease in the context of neutralizing TNF- α -mediated inflammation.

However, the issue of priority and new matter below is concerned with the written description of the diseases or conditions targeted in the claimed methods.

The instant claims now recite limitations which were not clearly disclosed in the priority applications as well as the specification as-filed, and would have changed the scope of the priority applications and do change the scope of the instant disclosure as-filed.

Neither the priority applications nor the instant application have provided a sufficient description of a representative number of species to represent the entire genus of "TNF- α -mediated disease which results in joint stiffness", as currently claimed.

It cannot be said that a subgenus is necessarily described by a genus encompassing it and a species upon which it reads. See In re Smith 173 USPQ 679, 683 (CCPA 1972) and MPEP 2163.05.

Therefore, reliance upon the genus of "TNF- α -mediated human diseases" and the disclosure of the Expression of TNF in joints and the monitoring of "joint stiffness" in rheumatoid arthritis patients, does not support the recitation of "TNF- α -mediated disease which results in joint stiffness", as currently claimed.

Also, it is noted that entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. Lockwood v. American Airlines Inc., 41 USPQ2d 1961 (Fed. Cir. 1977).

Also, applicant is reminded that a species reads on a genus.

Therefore, prior art referenced methods of treating "rheumatoid arthritis" anticipates the more generic recitation of "TNF- α -mediated disease which results in joint stiffness", as currently claimed.

Applicant's arguments concerning priority of the instant claims, drawn to "TNF- α -mediated disease which results in joint stiffness" have not been found persuasive.

Again, if applicant desires priority prior to the instant application, applicant is invited to point out and provide documentary support for the priority of the instant claims.

Applicant is reminded that such priority for the instant limitations requires written description and enablement under 35 U.S.C. § 112, first paragraph.

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4. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Applicant's amendment to the specification, filed 1/3/06 has obviated the previous objection under 35 U.S.C. 132 of the amendment, filed 4/8/05, because it introduced new matter into the disclosure with respect to the limitation "TNF- α -mediated joint ankylosis".

6. Claims 1, 3, 7-10, 14-16, 18-19 and 21-31 are rejected under 35 U.S.C. § 112, first paragraph, as the specification does not contain a written description of the claimed invention, in that the disclosure does not reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the application was filed.

The specification as originally filed does not provide support for the invention as now claimed: "TNF- α -mediated disease which results in joint stiffness".

Applicant's reliance upon various sections of the instant specification as well as the disclosure of the priority applications USSNs 07/670,827 and 07/943,852 to support the recitation "TNF- α -mediated disease which results in joint stiffness" is acknowledged.

However, the recitation of "TNF- α -mediated disease which results in joint stiffness" is not readily apparent either in the pending or priority application.

It appears that applicant relies upon a generic description of TNF- α -mediated human diseases and the "increase TNF concentrations relative to normal levels can also be localized to specific regions or cells in the body, such as joints ..." (e.g. see page 57, lines 25-28 of the instant specification) and various citations throughout the instant disclosure where "joint stiffness" is evaluated in the clinical monitoring of rheumatoid arthritis patients to support the recitation of "TNF- α -mediated disease which results in joint stiffness" as currently claimed.

Therefore, reliance upon the genus of "TNF- α -mediated human diseases" and the disclosure of the expression of TNF in joints and the monitoring of "joint stiffness" in rheumatoid arthritis patients, does not support the recitation of "TNF- α -mediated disease which results in joint stiffness", as currently claimed.

It appears that applicant relies upon the description of "stiffness" in the context of "rheumatoid arthritis" only (e.g. see Treatment of Arthritis, Sepsis, Allograft Rejection and Graft Versus Host Disease on pages 45-47 of priority document USSN 07/943,852) to support the recitation of "TNF- α -mediated disease which results in joint stiffness" as currently claimed.

Therefore, reliance upon the species of "joint stiffness" in "rheumatoid arthritis patients" does not support the recitation of "TNF- α -mediated disease which results in joint stiffness", as currently claimed.

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Neither the priority applications nor the instant application have provided a sufficient description of a representative number of species to represent the entire genus of "TNF- α -mediated disease which results in joint stiffness", as currently claimed.

It cannot be said that a subgenus is necessarily described by a genus encompassing it and a species upon which it reads. See In re Smith 173 USPQ 679, 683 (CCPA 1972) and MPEP 2163.05.

Therefore, reliance upon the genus of "TNF- α -mediated human diseases" and the disclosure of the Expression of TNF in joints and the monitoring of "joint stiffness" in rheumatoid arthritis patients, does not support the recitation of "TNF- α -mediated disease which results in joint stiffness", as currently claimed.

Also, it is noted that entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed. Lockwood v. American Airlines Inc., 41 USPQ2d 1961 (Fed. Cir. 1977).

Applicant's arguments concerning priority of the instant claims as they would read on similar principles of written description with respect to this new matter rejection under 35USC 112, first paragraph, drawn to "TNF- α -mediated disease which results in joint stiffness" have not been found persuasive.

The specification as filed does not provide a sufficient written description or set forth the metes and bounds of this phrase. The specification does not provide blazemarks nor direction for the instant methods encompassing the above-mentioned "limitation" as currently recited. The instant claims now recite limitations which were not clearly disclosed in the specification as-filed, and now change the scope of the instant disclosure as-filed. Such limitations recited in the present claims, which did not appear in the specification, as filed, introduce new concepts and violate the description requirement of the first paragraph of 35 U.S.C. 112.

Applicant is required to cancel the new matter in the response to this Office Action.

Alternatively, applicant is invited to provide sufficient written support for the Alimitations≡ indicated above. See MPEP 714.02 and 2163.06

7. Applicant's amendments, including the Townsend Declaration under 37 CFR 1.132, have satisfied the deposit requirements under 35 USC 112, first paragraph with respect to the A2 antibody (ATCC PTA-7045).

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8. Claims 1, 3, 7-10, 14-16, 18-19 and 21-31 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) Claims 1, 3-5, 7-12, 14-15, 21, 23-24 and 26-32 are indefinite in the recitation of "TNF α -mediated disease which results in joint stiffness" because the metes and bounds of said "TNF α -mediated disease which results in joint stiffness" is ill-defined and ambiguous.

For example, given the breadth and diversity of TNF-Related Pathologies disclosed on pages 58-59 of the instant specification and given the lack of sufficient common etiologies and defining characteristics of said TNF-Related Pathologies,

the ordinary artisan would not know of the metes and bounds of "TNF α -mediated disease which results in joint stiffness" at the time the invention was made.

There is insufficient description of the nature and targeted "TNF α -mediated diseases which result in joint stiffness" to apprise the ordinary artisan of the metes and bounds of the claimed methods.

B) The previous rejection with respect to the recitation of "cA2" has been withdrawn in view of applicant's amended claims, filed 12/2/05.

C) Applicant is reminded that the amendment must point to a basis in the specification so as not to add any new matter. See MPEP 714.02 and 2163.06.

9. Claims 1, 3, 7-10, 14-16, 18-19 and 21-31 are rejected under 35 U.S.C. § 102(b) as being anticipated by Le et al. (U.S. Patent No. 5,698,195) (see entire document, including the Claims).

Applicant's amendment and arguments, filed 1/3/06, have been fully considered but are not found convincing essentially for the reasons set forth herein / above as they read on the lack of written description of the recitation of "TNF α -mediated disease which results in joint stiffness" in the instant application and priority applications as filed.

Applicant argues that if this reference is sufficient to qualify as prior art, it is sufficient to support to the claims for priority.

However, for the reasons of record and addressed above, the issues of priority are associated with written description, which, in turn, differ from the issues governing prior art.

The following of record is reiterated for applicant's convenience.

Le et al. teach methods of treating TNF-related pathologies, including rheumatoid arthritis (see column 34, line 53 and Claims) with TNF- α -specific antibodies, including recombinant and chimeric antibodies and the cA2 antibody specificity of the instant invention (see entire document, including Summary of the Invention, Detailed Description of the Invention and Claims). Also see Therapeutic Administration for the well known dosing and modalities of administering therapeutic antibodies of interest to meet the needs of the patients (see columns 35- 41).

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Applicant is reminded that no more of the reference is required than that it sets forth the substance of the invention. The claimed functional limitations would be inherent properties of the referenced methods to treat rheumatoid arthritis with recombinant cA2-specific antibodies.

A species anticipates a claim to a genus. See MPEP 2131.02.

Applicant's arguments have not been found persuasive.

10. The non-statutory double patenting rejection, whether of the obvious-type or non-obvious-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Orman*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR § 1.321 (b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR § 1.78 (d).

Effective January 1, 1994, a registered attorney or agent of record may sign a Terminal Disclaimer. A Terminal Disclaimer signed by the assignee must fully comply with 37 CFR § 3.73(b).

11. It is noted that applicant has a number of copending applications in the instant family of applications with the same A2 / cA2 TNF-specific antibodies.

Again, given the history of a number of continuations-in-part, it is not readily apparent whether the claims were subject to restriction and whether the claims are subject to double patenting rejections.

Applicant is invited to clarify which applications should be subject to rejections under the judicially created doctrine of obviousness-type double patenting.

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12. Claims 1, 3, 7-10, 14-16, 18-19 and 21-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 5,698,195 and claims 1-13 of U.S. Patent No. 5,919,452.

Although the recitation of the instant and patented claims differ, all of the instant and patented claims are drawn to the same or nearly the same A2/cA2-specific TNF- α -specific antibodies having the same or nearly the same functional properties of neutralizing TNF- α in the treatment of TNF-related conditions, such as rheumatoid arthritis as well as other inflammatory /autoimmune conditions. Clearly, the methods of U.S. Patent No. 5,698,195 anticipate the instant claims. Also, given the lack of clarity as to the metes and bounds of the recitation of "TNF α -mediated disease which results in joint stiffness", applicant is invited to clarify whether the conditions recited and targeted in the claims of U.S. Patent No. 5,919,452 anticipate the instant methods.

13. No claim is allowed.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gambel whose telephone number is (571) 272-0844. The examiner can normally be reached Monday through Thursday from 7:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841.

The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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